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**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY**

HOWMEDICA OSTEONICS CORP.,

Plaintiff,

vs.

ZIMMER, INC. and CENTERPULSE
ORTHOPEDICS, INC., formerly known as
SULZER ORTHOPEDICS,

Defendants.

Civil Action No. 05-CV-00897
(WHW)(CLW)

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**PLAINTIFF HOWMEDICA OSTEONICS CORPORATION'S OPPOSITION TO
DEFENDANT ZIMMER'S MOTION FOR FEES AND PREJUDGMENT INTEREST**

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I. INTRODUCTION

This is not an exceptional case. To the contrary, this case involved 11 years of hard-fought litigation between sophisticated competitors over Howmedica's ground-breaking technology relating to highly cross-linked ultra-high molecular weight polyethylene ("UHMWPE") for medical implants. The case is now over. While Zimmer complains about the length of this case, the delay was caused by its own decision to initiate proceedings in the Patent Office ("PTO") in 2009 following this Court's denial of its invalidity and noninfringement summary judgment motion of one patent-in-suit. There is no "gross injustice" in requiring Zimmer, like co-Defendant Smith & Nephew who recently settled, to bear its own attorney fees.

Zimmer's motion relies heavily on alleged inequitable conduct by Howmedica scientist Dr. Aiguo Wang during the prosecution of the patents-in-suit. Inequitable conduct is a serious allegation that Howmedica does not take lightly. However, despite dramatic allegations of "lying" and "fraud," Zimmer points to not one iota of evidence to support its heavy burden to prove specific intent to deceive the PTO. To the contrary, Dr. Wang, a respected scientist, testified under oath that he believed that the data and references Zimmer alleges were improperly withheld from the PTO were inaccurate, inconclusive, or irrelevant, and thus not appropriate to disclose. Dr. Wang's actions cannot be characterized as inequitable conduct, particularly under the Federal Circuit's rigorous *Therasense* test.

Nor did Howmedica commit litigation misconduct. Zimmer disingenuously claims that Howmedica should have dismissed its lawsuit upon learning of Lue, a master's thesis that ultimately criticized and taught away from the processes described in the patents-in-suit. But the Patent Trial and Appeal Board ("PTAB") and the Federal Circuit both expressly noted that Lue, on its face, disclosed insufficient information to anticipate Howmedica's patent. Rather, Zimmer relied on a highly unusual application of the doctrine of inherent anticipation. Because it was far

from clear that Zimmer would be able to meet its burden of proof under its complicated theory of inherency, Howmedica in good faith challenged Zimmer's invalidity arguments. Zimmer further complains about Howmedica's positions on the General Rule, even though Zimmer told this Court that the General Rule was demonstrably wrong then later urged the PTAB and Federal Circuit to apply it. Zimmer's remaining allegations are equally-flawed and are nothing more than complaints about ordinary disagreements that typically occur in patent litigation. Howmedica's steadfast defense of its presumptively valid patents was not litigation misconduct.

Zimmer's motion for attorney fees should be denied.

II. FACTUAL BACKGROUND

Howmedica and Zimmer are direct competitors in the market for orthopaedic implants, including replacement hip and knee joints made of UHMWPE. (Dkt. 306 at 5.) Standard UHMWPE was first used as a bearing surface in orthopedic implants in the 1960's. (*Id.* at 3.) However, those implants deteriorated over time as the UHMWPE oxidized and wore away. (*Id.*) The release of small particles of UHMWPE into the joint led to pain and bone degradation. (*Id.*)

Howmedica's inventors discovered that heating UHMWPE after irradiation for at least a certain time at a certain temperature without oxygen decreases the level of "free radicals" (i.e., un-paired electrons that can bond with oxygen to create oxidation) and increases the level of "crosslinks" (i.e., reactions between un-paired free-radicals). (*Id.*) Free radical crosslinking increases UHMWPE resistance to oxidation and wear over prior UHMWPE materials. (*Id.*) Howmedica was awarded numerous patents, including the patents-in-suit, on its treating process for highly-crosslinked UHMWPE and the properties that result from such process. (Exs. A-D.)

In 1996, after more than five years of research, testing, and clinical studies, Howmedica was the first company to market a highly cross-linked UHMWPE implant with improved wear and oxidation resistance. (Dkt. 306 at 4.) Howmedica's technology changed the standard of care,

displacing standard UHMWPE and causing an immediate, lasting impact on the multi-billion dollar orthopaedic implant market. (*Id.*) Major competitors, including Zimmer, scrambled to introduce their own products having the same properties as Howmedica's claimed inventions. Zimmer introduced its highly cross-linked UHMWPE hip implants in 1999. (*Id.* at 5.)

Howmedica initiated this lawsuit in 2005, alleging that Zimmer and Smith & Nephew infringed four of its patents. (Dkt. No. 1; Exs. A-D.) As is typical in a hard-fought litigation between sophisticated competitors, discovery was complex and comprehensive. The parties served 751 document requests and 98 interrogatories, took 95 depositions, filed 9 dispositive motions, and created a docket in this Court of upwards of 430 entries. Despite this case's scope and complexity, Zimmer does not allege that Howmedica acted improperly in discovery, failed to conduct a pre-suit investigation, or was motivated by bad faith in initiating the lawsuit.

In 2007, this Court granted Defendants' motion for partial summary judgment that three of the patents were invalid. Notwithstanding this Court's ruling, Howmedica acted in good faith in trying to enforce its presumptively valid patents against two large competitors, who followed Howmedica to market with highly crosslinked UHMWPE products believed to be infringing.

Selected claims of the fourth patent, the '020 patent, were invalidated as inherently anticipated in a reexamination proceeding initiated by Zimmer. Others were held to be valid until the Federal Circuit's 2016 split decision. Given the complexities of proving obviousness and inherent anticipation, a seldom-used theory acknowledged by the Federal Circuit as "tricky," Howmedica vigorously opposed Zimmer's petition, including Zimmer's prior art "recreations." While Zimmer eventually prevailed, Howmedica appropriately defended its presumptively valid patent against Zimmer's challenge. Howmedica's case was so meritorious that Defendant Smith & Nephew settled with Howmedica in January 2016 rather than seeking attorney fees and risking

a finding by the Federal Circuit that one or more claims of the '020 patent was valid.

III. ARGUMENT

A. Under § 285 Only “Rare” Cases Should Be Declared “Exceptional”

In patent infringement cases, “a court in exceptional cases may award reasonable attorney fees to the prevailing party.” 35 U.S.C. § 285 (emphasis added). An “exceptional case” is one that is “uncommon,” “rare,” or “not ordinary”; it “stands out from others with respect to the substantive strength of a party’s litigating position (considering both the governing law and the facts of the case) or the unreasonable manner in which the case was litigated.” *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 134 S. Ct. 1749, 1756 (2014). In determining exceptionality, the Court should consider the “totality of the circumstances.” *Id.* While “there is no precise rule or formula” for determining if a case is exceptional, “fee awards are not to be used ‘as a penalty for failure to win a patent infringement suit.’” *Id.*; *Gaymar Indus., Inc. v. Cincinnati Sub-Zero Prods., Inc.*, 790 F.3d 1369, 1373 (Fed. Cir. 2015). “Since *Octane*, district courts have awarded fees when the patentee had a history of bringing nuisance value cases, was motivated by a bad faith desire to bankrupt the alleged infringer with litigation costs, resisted discovery requests, made no reasonable effort to verify the defendant’s products infringed, engaged in inequitable conduct at the PTO, or made misrepresentations during the litigation.” *RLIS, Inc. v. Cerner Corp.*, No. 12-209, 2015 WL 5178072, at *2 (S.D. Tex. Sept. 3, 2015) (footnotes omitted); *see also SFA Sys., LLC v. Newegg Inc.*, 793 F.3d 1344, 1349-50 (Fed. Cir. 2015). Even in an exceptional case, a court may deny fees. *S.C. Johnson & Son, Inc. v. Carter-Wallace, Inc.*, 781 F.2d 198, 201 (Fed. Cir. 1986); *see also ICON Health & Fitness, Inc. v. Octane Fitness, LLC*, 576 F. App’x 1002, 1005 (Fed. Cir. 2014) (non-precedential) (“The Supreme Court’s decision in *Octane* did not, however, revoke the discretion of a district court to deny fee awards even in exceptional cases.”); *Tyco Healthcare Grp. LP v. Mut. Pharm. Co.*, No.

07-1299, 2016 WL 3965201, at *3 (D.N.J. July 22, 2016).

The circumstances here do not warrant an exceptional case finding or an attorney fee award. Far from being a nuisance value case, Howmedica initiated this lawsuit against its two main competitors to protect its patented and market-changing products. Zimmer does not allege that Howmedica was motivated by bad faith, engaged in improper discovery tactics, or failed to conduct a pre-suit investigation. Rather, Zimmer's request for fees is based on conclusory allegations of inequitable conduct and unsupportable allegations of litigation misconduct. Viewing the totality of circumstances, this case is not exceptional. There is no gross injustice in requiring Zimmer to bear its attorney fees, as is typically required in all lawsuits.

B. Howmedica Did Not Engage In Inequitable Conduct

Zimmer asks this Court to take the rare step of declaring this case "exceptional" in light of unproven allegations that Howmedica acted improperly during the prosecution of its patents. Zimmer primarily focuses on the period immediately following Stryker Osteonics' acquisition of Howmedica when the named inventors departed the merged company and in their absence, Dr. Wang stepped in to assist with the prosecution of the patents-in-suit. Without any evidence of a specific intent to deceive, Zimmer cherry-picks a handful of instances where it alleges, based on a distorted view of the evidence, that Howmedica should have disclosed additional information to the PTO. Zimmer's allegations fall far short of establishing inequitable conduct.

1. Inequitable Conduct Requires Specific Findings Of (1) Materiality And (2) Intent To Deceive The PTO

"[T]he remedy for inequitable conduct is the 'atomic bomb' of patent law." *Therasense, Inc. v. Becton, Dickinson & Co.*, 649 F.3d 1276, 1288 (Fed. Cir. 2011) (en banc). "[A]llegations of inequitable conduct are routinely brought on 'the slenderest grounds,'" which "has plagued not only the courts but also the entire patent system." *Id.* at 1289. To address this problem, the

Federal Circuit recently heightened the inequitable conduct standard. *See id.* at 1290-95.¹

To prove inequitable conduct, Zimmer must first show that Howmedica “misrepresented or omitted material information.” *Id.* at 1287. “To establish materiality, it must be shown that the PTO would not have allowed the claim but for the nondisclosure or misrepresentation.” *In re Rosuvastatin Calcium Patent Litig.*, 703 F.3d 511, 519 (Fed. Cir. 2012). Second, Zimmer must separately prove that the misrepresentation or omission was done “with specific intent to deceive the PTO.” *Therasense*, 649 F.3d at 1290. “In a case involving nondisclosure of information” Zimmer must prove “that the applicant *made a deliberate decision* to withhold a *known* material reference.” *Id.* While a “court may infer intent from indirect and circumstantial evidence,” “specific intent to deceive must be ‘the single most reasonable inference able to be drawn from the evidence.’” *Id.* “[W]hen there are multiple reasonable inferences that may be drawn, intent to deceive cannot be found.” *Id.* at 1290-91. Notably, “[m]ateriality and intent must be separately established.” *Rosuvastatin*, 703 F.3d at 519. “A district court should not use a ‘sliding scale,’ where a weak showing of intent may be found sufficient based on a strong showing of materiality, and vice versa.” *Therasense*, 649 F.3d at 1290.

Inequitable conduct must be proven by clear and convincing evidence. *See id.* at 1287. Here, Zimmer asks this Court to “find this case exceptional without making a finding of inequitable conduct by clear and convincing evidence.” (Dkt. 436 at 19 n.5.) The Federal Circuit has not yet held that a lower standard of proof can be applied to inequitable conduct allegations decided for the first time as part of a fees motion.² (*See id.*) Regardless of whether it

¹ Zimmer developed its inequitable conduct “theories” under pre-*Therasense* law. (*See generally* Dkt. 264.) Despite the substantial change in law, Zimmer continues to press forward with the same allegations of inequitable conduct, often times relying exclusively on pre-*Therasense* law.

² While a few district courts have applied the preponderance of the evidence standard, those courts have also noted that “proof of inequitable conduct will be entitled to substantial weight”

is theoretically possible to do so, district courts rarely award attorney fees based on alleged inequitable conduct where the issue was not already decided during litigation under a clear and convincing standard. *See DietGoal*, 2015 WL 1284669, at *6-7 (denying fees because “Tyson has put the Court in the position that it is required to rule on this issue [inequitable conduct] with only minimal briefing and no substantial evidentiary development. Because the burden is on Tyson to show that this case is exceptional, the consequences of a thin record on this issue fall upon Tyson.”); *Stretchline*, 2015 WL 5175196, at *7, *11 (denying fees where fee request was based on unlitigated inequitable conduct allegations); *E. Coast Sheet Metal Fabricating Corp. v. Autodesk, Inc.*, No. 12-517, 2015 WL 4603463, at *4-6 (D.N.H. July 30, 2015) (same); *Alpha Tech. U.S.A. Corp. v. Mlsna Dairy Supply, Inc.*, No. 13-870, 2015 WL 128086, at *2-3 (W.D. Wis. Jan. 8, 2015), *aff’d* 622 F. App’x 909 (Fed. Cir. 2015) (same). In fact, in the cases relied upon by Zimmer, the courts universally denied fee awards based on unlitigated inequitable conduct allegations. (See Dkt. 436 at 19 n.5 (citing *DietGoal*, *Stretchline* and *E. Coast Sheet Metal*).)

2. The Inaccurate Swell Ratio Data Did Not Need To Be Disclosed

As one basis for alleged inequitable conduct, Zimmer alleges that Dr. Wang failed to disclose inaccurate data to the PTO and purportedly acted with intent to deceive because he refused to answer questions about the data posed by the Examiner. Zimmer’s allegations fail, particularly when properly viewed in light of the entire context of the evidence.

a. During Prosecution Howmedica Submitted Accurate Information About Its Swell Ratio Testing

During the prosecution of the ‘934 patent, the Examiner rejected pending claims based on

only “[i]f the evidence of inequitable conduct is sufficient to satisfy the clear and convincing standard....” *See DietGoal Innovations LLC v. Chipotle Mexican Grill, Inc.*, No. 12-764, 2015 WL 1284669, at *5 (E.D. Tex. Mar. 20, 2015); *Stretchline Intellectual Props. Ltd. v. H & M Hennes Mauritz LP*, No. 10-371, 2015 WL 5175196, at *6 (E.D. Va. Sept. 3, 2015).

the Streicher article, finding that the processing steps outlined in Streicher would have resulted in the claimed medical implant with specific levels of cross-linking. (Ex. E at 2-4.) To overcome the rejections, Howmedica did testing to measure the amount of cross-linking in Streicher. (Ex. F at 7-8; Ex. G.) One way to measure the level of cross-linking is through a “swell” test, which determines a “swell ratio” that is inversely related to the amount of cross-linking. (Ex. G at ¶3; Ex. H at 87-89.) Dr. Wang performed the swell test

on two samples of the Streicher material. (Ex. I at 213, 214-25.) One of the two samples used, five pairs of discs, was prepared according to the method described in the Streicher article. (Ex. I at 213, 214-25.) The other sample, five pairs of discs, was prepared according to the method described in the patent. (Ex. I at 213, 214-25.) The results of the swell test for the two samples are shown in Table 1. (Ex. I at 213, 214-25.) The results show that the Streicher material had a higher swell ratio than the patent material. (Ex. I at 213, 214-25.) This indicates that the Streicher material had a lower degree of cross-linking than the patent material. (Ex. I at 213, 214-25.) Because of this, Dr. Wang concluded that the Streicher material was not as strong as the patent material. (Ex. I at 213, 214-25.) This conclusion was based on the results of the swell test, which showed that the Streicher material had a higher swell ratio than the patent material. (Ex. I at 213, 214-25.)

To resolve the discrepancy in the Streicher results, the test was repeated on a third sample, producing a swell ratio of 3.04. (Ex. I at 213, 214-25.) This was still well below the level of 4.20 and is close to the levels of variation seen in the other samples. (Ex. I at 213, 214-25.) The results were confirmed that the 3.11 result was not accurate. (Ex. I at 213, 214-25.)

Dr. Wang then averaged the results of the two accurate Streicher data points and compared that average to the average obtained for two samples created following the inventive method disclosed in the patent. (Ex. I at ¶¶20-21; Ex. G.) That comparison illustrated that the patented material had a higher degree of cross-linking than the Streicher material. (Ex. G at ¶¶4-

6.) Dr. Wang further noted that the cross-linking in the Streicher material “was not statistically different than the cross-linking determined from swell tests of a material irradiated in pure nitrogen at 25 kGy but not annealed,” i.e., another prior art material. (*Id.* at ¶3.)

After considering Dr. Wang’s testing, the Examiner again rejected the claims and explained why she did not find Dr. Wang’s affidavit persuasive. First, the Examiner requested additional information regarding the tested materials (highlighted in pink). The Examiner also expressed skepticism over the significance of the swell ratio comparison based on her incorrect assumption that the Method D material (the patented invention) was in the form of a shaped implant machined from a rod of UHMWPE whereas the Streicher material was in the form of a 300 micrometer film (highlighted in yellow). Finally, the Examiner asked about the form of material annealed at 80°C for 18 hours in nitrogen (highlighted in green).

The Affidavit of Aiguo Wang filed 12-13-99 has been considered but has not been found persuasive for the following reasons. The Affidavit does not fully describe the materials that were tested so it is not clear what materials or conditions produced the average swell ratio reported. What are the identities of the “Application Method D Material” and the “Streicher Method” material defined by chemical name, structure, method of preparation or properties? The average swell ratio obtained by (1) irradiating a sample of UHMWPE “GUR1050” in the form of a shaped implant machined from a rod of UHMWPE followed by annealing at 50 C for 144 hours in a sealed blister pack and the average swell ratio obtained by (2) irradiating a sample of UHMWPE “GUR1050” in the form of a 300 micrometer film at 80 C for 2 hours in nitrogen is compared in the Affidavit. However, it is not clear whether the difference in average swell ratio is a significant improvement (3.785 compared with 4.08). Furthermore, it is not clear whether the difference results from the difference in time and temperature or from the difference in form of the material (shaped article machined from a rod compared with a very thin film). It would appear that applicant is obtaining only expected results wherein the time and temperature of annealing has been adjusted to provide the desired results wherein the article being irradiated and annealed is in the form of a thicker, denser shaped article rather than the thin film annealed as taught by Streicher. However, the Affidavit does not clearly define the material annealed at 80 C for 18 hours in nitrogen. Was the material a 300 micrometer thin film of “GUR1050” or a shaped article machined from a rod of “GUR1050”?

(Ex. K at 2-3 (emphasis added).) Contrary to Zimmer’s allegations, it is clear that the Examiner

did not request a statistical analysis regarding the swell ratio comparisons.

In response to the Examiner's questions, Dr. Wang submitted a Supplemental Affidavit in which he methodically described each of the materials identified in his prior Affidavit. (Ex. L at ¶¶2-4.) He explained that the samples tested "were all identical 1mm thick sheets of GUR1050," and that "the annealing (heat treatment) method after irradiation was the only variable." (*Id.* at ¶1.) As a result, the differences in swell ratios between the Streicher material and the patented material were attributable to the patented invention and not to the shape of the materials, as the Examiner had originally assumed. (*Id.* at ¶¶1, 5; Ex. T.) Dr. Wang further provided the swell ratio for the "not annealed" (prior art) sample described in his prior Affidavit and reiterated that the difference between that sample and Streicher was not statistically different, e.g., Streicher was akin to the prior art, not the patented invention. (Ex. L at ¶6; Ex. G at ¶3.) Dr. Wang did not perform any other statistical analysis nor did the Examiner ask for any further information.

b. Disclosing Only Accurate Data Does Not Constitute Inequitable Conduct

Zimmer claims that Dr. Wang and Howmedica committed inequitable conduct by failing to disclose the inaccurate Streicher swell ratio [REDACTED] to the PTO during prosecution and on reexamination. However, Dr. Wang explained in detail the basis for his conclusion that the [REDACTED] was inaccurate, and therefore, the inaccurate data was neither material to patentability nor withheld from the Examiner with a specific intent to deceive.

With respect to materiality, the law is clear—there is no duty to disclose inaccurate data to the PTO. *See Modine Mfg. Co. v. U.S. Int'l Trade Comm'n*, 75 F.3d 1545, 1557–58 (Fed. Cir. 1996), *abrogated on other grounds by* 234 F.3d 558 (Fed. Cir. 2000) (no inequitable conduct where applicant "replaced" certain early data "with more accurate data"); *Takeda Chem. Indus., Ltd. v. Mylan Labs., Inc.*, 417 F. Supp. 2d 341, 394 (S.D.N.Y. 2006) (no inequitable conduct

where applicant omitted data from one control animal where the animal “had anomalous readings”); *Pfizer Inc. v. Ranbaxy Labs, Ltd.*, 405 F. Supp. 2d 495, 523 (D. Del. 2005) (“unreliable” data not material); *Freedom Wireless, Inc. v. Boston Commc’ns Grp., Inc.*, 390 F. Supp. 2d 63, 86-87 (D. Mass. 2005) (no obligation to submit inaccurate statements to the PTO).³ In fact, it was “entirely appropriate” and “reflects the exercise of sound scientific judgment” for Dr. Wang to exclude unreliable data from PTO submissions during the prosecution of the ‘934 patent and the reexamination of the ‘020 patent. *See Takeda*, 417 F. Supp. 2d at 394. Zimmer has not pointed to a single case where inaccurate data was found material to patentability. (Dkt. 436 at 20.)⁴ For this reason alone, Zimmer’s allegations should be rejected.

Zimmer’s allegations regarding intent are likewise deficient. According to Zimmer, specific intent to deceive can be inferred because Dr. Wang “dodged the examiner’s request as to whether his rigged test showed a ‘significant’ improvement over the patented material.” (Dkt. 436 at 20.) As explained above, the Examiner never asked Dr. Wang for a statistical analysis of his swell testing results. (Ex. K at 2-3.) Rather, the Examiner surmised that it was unclear whether the difference in average swell ratio demonstrated a significant improvement or whether the difference was simply attributable to the form of the tested materials (shaped article machined from a rod versus very thin film). (*Id.*) Dr. Wang confirmed that all the samples were the same shape. (Ex. L at ¶¶1-4.)

Nor did Dr. Wang “obfuscate” the Examiner’s request by commenting on the lack of

³ If information was not considered material under the less stringent materiality standard in these pre-*Therasense* cases, it would likewise not be material under *Therasense*’s heightened standard.

⁴ Zimmer complains that Howmedica should have disclosed individual data points in addition to the averages. (Dkt. 436 at 7.) Dr. Wang and Howmedica expressly told the Examiner that the results were averaged from two samples. (Ex. G at Chart.) The Examiner did not ask for the individual data points. There is nothing improper about providing averages to an Examiner. *See Pfizer*, 405 F. Supp. 2d at 524 (no inequitable conduct when applicant submitted averages).

statistical significance between Streicher and the other prior art sample, i.e., the non-annealed nitrogen irradiated sample, as Zimmer dramatically charges.⁵ (Dkt. 436 at 7, 24.) Dr. Wang had already made the same comment in his original Affidavit but had not included the actual swell ratio for the non-annealed nitrogen sample. (Ex. G at ¶3). Since the Examiner specifically commented that the original Affidavit “does not fully describe the materials that were tested,” Dr. Wang properly provided additional information regarding the non-annealed nitrogen sample in his March 22, 2000 Affidavit, including the average swell ratio of 4.255 that formed the basis for his original statement that the crosslinking of the Streicher material “was not statistically different than the cross-linking determined from swell tests of a material irradiated in pure nitrogen at 25 kGy but not annealed.” (Ex. L at ¶6; Ex. G at ¶3.) No intent to deceive can be inferred because Dr. Wang provided the exact information the Examiner requested. *Therasense*, 649 F.3d at 1290 (“specific intent to deceive must be ‘the single most reasonable inference’”).

Zimmer’s fallback arguments—that the Court should infer intent because Dr. Wang omitted an inaccurate data point from his affidavit and Howmedica did not submit this inaccurate information during ‘020 patent reexamination—likewise fail. [REDACTED]

We include the procedure `denoise` because it was used as a measure of the correlation of the \mathbf{u} and \mathbf{v}

"Structure material" and could have a bad time "fitting" to the machine if used.

Dr. Wang's belief that the [REDACTED] defeats any specific intent to deceive. *See 1st Media, LLC v. Elec. Arts, Inc.*, 694 F.3d 1367, 1374-76 (Fed. Cir. 2012); *Monsanto Co. v. Bayer Bioscience N.V.*, 363 F.3d 1235, 1239-42 (Fed. Cir. 2004)

⁵ Zimmer relies on the declaration of its own statistical expert, Dr. Wei, as evidence that Howmedica scientist Dr. Wang knew that there was not a statistical difference between the swell ratios of the patented material and the Streicher material. (Dkt. 436 at 7 (citing Def. Ex. 29).) Obviously Dr. Wei cannot testify as to Dr. Wang's knowledge. And Dr. Wang testified that he never performed a statistical analysis on this case. (Def. Ex. 10 at 102-103.)

(reversing summary judgment of inequitable conduct when non-disclosed tests “led to no reliable conclusion”); *Pfizer*, 405 F. Supp. 2d at 524-25 (no intent where applicant believed omitted data was obtained from contaminated samples and it provided data “it believed was scientifically sound”); *Kinetic Concepts, Inc. v. Bluesky Med. Corp.*, No. 03-832, 2007 WL 1113002, at *3-4 (W.D. Tex. Apr. 4, 2007) (no intent where applicant “properly excluded some data from its test results because unknown variations in experimental procedures are statistically unreliable”); *Auxilium Pharm., Inc. v. Watson Labs., Inc.*, No. 12-3084, 2014 WL 9859224, at *36 (D.N.J. Dec. 16, 2014) (no intent where applicant did not disclose studies he believed “were failures”).⁶

3. Dr. Wang Believed [REDACTED]

In addition to conducting swell testing, Dr. Wang also performed [REDACTED]

[REDACTED] Dr. Wang also conducted swell testing. (Ex. A at 141.) That testing, however, returned

[REDACTED] Inconclusive testing need not be disclosed to the PTO.

As discussed above, during prosecution of the ‘934 patent, the Examiner rejected the claims based on Streicher because the Examiner believed that the material in Streicher would have comparable levels of cross-linking to the patented material. In addition to swell ratio testing, in some circumstances testing a material’s solubility can also provide an indication of the level of cross-linking. (Ex. A at 9:50-10:48.) For example, the ‘934 patent discloses solubility testing using trichlorobenzene. (*Id.*) At the time the ‘934 patent was being prosecuted before the PTO, Howmedica did not have [REDACTED]

[REDACTED] trichlorobenzene was a known solvent. (Ex. A at 142, 37.) Because it was a known

[REDACTED] solvent solubility tests with trichlorobenzene, Dr. Wang conducted swell and solubility

⁶ Zimmer’s pre-*Therasense* cases are inapposite. *Cargill, Inc. v. Canbra Foods, Ltd.*, 476 F.3d 1359, 1367 (Fed. Cir. 2007) relies on the now-overturned sliding scale approach in finding intent to deceive. See *Therasense*, 649 F.3d at 1290. In *Rohm & Haas Co. v. Crystal Chem Co.*, 722 F.2d 1556 (Fed. Cir. 1983), unlike here, the applicant falsified numerous sets of data, e.g., changing 0% to 30%, submitted to the PTO. *Id.* at 1560-62, 1570.

by conducting solubility testing with a different solvent, xylene. (3) as E28 3.1)

[illegible]

Such inaccurate test results are simply not material to patentability. *See Impax Labs., Inc. v. Aventis Pharm., Inc.*, 468 F.3d 1366, 1375-78 (Fed. Cir. 2006) (no inequitable conduct where applicant did not disclose “irrelevant” data); *Alcon Research, Ltd. v. Apotex Inc.*, 790 F. Supp. 2d 868, 910 (S.D. Ind. 2011), *aff’d in part, rev’d in part*, 687 F.3d 1362 (Fed. Cir. 2012) (an examiner would not “want[] to know about incomplete and inconclusive data” and it would be “improper to submit incomplete and inconclusive data”); *Takeda*, 417 F. Supp. 2d at 391-92 (“[i]t was entirely appropriate” for applicant to “select the test results on which [it] could best rely” because “[n]ot all tests yield similarly reliable data”); *Pfizer*, 405 F. Supp. 2d at 523 (*in vivo* data did not need to be disclosed because for this patent the “*in vitro* data is the best and most relevant data”).⁷ Zimmer’s lone district court case does not suggest otherwise. (Dkt. 436

⁷ Zimmer also argues that the Court should presume the xylene solubility test was material

at 19-20.) In *Apotex, Inc. v. UCB, Inc.*, 970 F. Supp. 2d 1297, 1326-27 (S.D. Fla. 2013), the applicant withheld accurate data that the applicant knew showed that the claimed invention was not different from the prior art. This is not the case here because [REDACTED] [REDACTED]. The PTO later confirmed Dr. Wang's belief that a material's solubility in xylene and trichlorobenzene cannot be correlated because xylene and trichlorobenzene are different solvents. (Ex. M at 17.)

[illegible]

Because the court never states how it knew that the applicant intended not to disclose material that was already identified as highly confidential,” Zimmer’s argument necessarily boils down to improperly inferring specific intent to deceive based on non-disclosure alone. *See Therasense*, 649 F.3d at 1290 (“Proving that the applicant knew of a reference, should have known of its materiality, and decided not to submit it to the PTO does not prove

because withholding that data was allegedly an “affirmative act of egregious misconduct.” (Dkt. 436 at 22.) As Zimmer admits, materiality is only presumed when “an unmistakably false affidavit” is filed. (*Id.*) No such affidavit was filed in this case. (*See supra* Sec. III.B.2-3.)

specific intent to deceive.”); *1st Media*, 694 F.3d at 1372-73. This is particularly improper where, as here, [REDACTED]

[REDACTED]

[REDACTED] On this record, specific intent to deceive cannot be inferred, and is far from “the single most reasonable inference able to be drawn from the evidence.” *Therasense*, 649 F.3d at 1290; *Impax*, 468 F.3d at 1378 (no intent to deceive where applicant did not disclose irrelevant testing); *Pfizer*, 405 F. Supp. 2d at 523 (no intent to deceive where applicant “made a good faith determination” that certain “data was not relevant”); *Takeda*, 417 F. Supp. 2d at 398 (same).

4. There Was No Deliberate Decision To Withhold The Immaterial Wang Papers And Jordi Report

Zimmer next alleges that during the prosecution of the ‘020 patent, Howmedica should have disclosed three versions of a 1996 publication that Dr. Wang co-authored with the inventors of the ‘020 patent (“Wang Papers”) and a report from the independent Jordi laboratory (“Jordi Report”), even though those documents are not even prior art to the ‘020 patent.

Zimmer has not and cannot show any specific intent to deceive.⁸ Zimmer merely alleges that Howmedica’s nondisclosure of the Wang Papers or the Jordi Report itself proves intent to deceive. (Dkt. 436 at 23.) This is contrary to the law. *1st Media*, 694 F.3d at 1374-76.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

⁸ The Wang Papers and Jordi Report are also immaterial at least for the reasons discussed *infra* in Section III.C.3.a. See *Impax*, 468 F.3d at 1375-78; *Pfizer*, 405 F. Supp. 2d at 522-23; *Takeda*, 417 F.3d at 391-92. Additionally, the PTAB ultimately found the Examiner’s reliance on the Wang Papers during the ‘020 patent reexamination not persuasive. (Ex. M at 7, 17.)

■; *Cancer Research Tech. Ltd. v. Barr Labs., Inc.*, 625 F.3d 724, 734 (Fed. Cir. 2010) (no inequitable conduct based on failure to disclose his prior publications where scientist “did not appreciate their potential importance to the patentability” of the claimed invention). Because the un rebutted evidence shows that there was no deliberate decision to withhold the Wang Papers and the Jordi Report, specific intent to deceive cannot be found and Zimmer’s allegations of inequitable conduct fail. See *Therasense*, 649 F.3d at 1290-91; *Alpha*, 2015 WL 128086, at *2 (inequitable conduct allegations did not make case exceptional where the applicant “plausibly avers” that “he had forgotten” about the prior use and “even if recalled, he did not think it was relevant in light of the different solutions used with that system”).

5. Dr. Wang Correctly Reported His Employment Status

Zimmer next alleges that Howmedica committed inequitable conduct by submitting Dr. Wang’s affidavits to the PTO while misrepresenting that Dr. Wang was “disinterested.” (Dkt. 436 at 21.) A review of the record reveals that Howmedica accurately represented Dr. Wang’s affiliation with the patent applicant and never represented that Dr. Wang was a “disinterested” declarant. And, the PTO did not request an affidavit from a disinterested party.

When Dr. Wang’s Affidavit was submitted to the Examiner with the Applicant’s Amendment, the accompanying “Remarks” clearly and unequivocally stated that the “Applicant has performed tests....The Examiner is directed to the attached Affidavit of Aiguo Wang, which sets forth the results of this testing.” (Ex. F at 7 (emphasis added).) The Examiner, therefore, was clearly on notice that the applicant performed the testing, not some disinterested party.

Moreover, Dr. Wang correctly indicated in his Affidavit that he was employed by “Howmedica Osteonics Corporation and have been employed there since 1991.” (Ex. G at ¶1.) Howmedica Osteonics Corporation was then, and still is, a division of Stryker. While Dr. Wang did not expressly state there was a relationship between Howmedica and Stryker, the prosecuting

attorney submitted a “Terminal Disclaimer” simultaneously with the Amendment and Wang Affidavit that expressly and unequivocally explained that “[t]he original Assignment was from the inventors to Howmedica Inc. A copy of page 2 of the Assignment document from Howmedica Inc. to Stryker Technologies Corporation (Reel/Frame 9781/0191) is attached hereto.” (Ex. O at 2.) Howmedica’s submissions to the PTO contradict Zimmer’s allegation that Howmedica misrepresented that Dr. Wang was a “disinterested party.”

Furthermore, the un rebutted evidence shows that

On this record, intent to deceive cannot be inferred. *Therasense*, 649 F.3d at 1290-91.

6. Zimmer Provides No Evidence That Dr. Sun Submitted A False Affidavit With Specific Intent To Deceive

Zimmer’s last assertion of inequitable conduct—that Dr. Sun submitted a “false affidavit” during the prosecution of a patent not at issue in this litigation—also fails (*See* Dkt. 436 at 22.)

First, there is no evidence that the statements in Dr. Sun’s affidavit are false. The patents-in-suit state: “It has been found that an acceptable level of residual free radicals is 1.0×10^{17} [spins]/g.” (Ex. A at 7:30-32; Ex. B at 7:28-30; Ex. C at 7:28-30; Ex. D at 7:11-13.) The processes taught by the patents to achieve this level of free radicals involved heating and irradiating in an inert environment, i.e., without oxygen. (Ex. A at 3:66-4:15.) During the prosecution of a patent not at issue in this litigation, Dr. Sun represented to the PTO that “[f]ree radical concentrations are several orders of magnitude higher without the process taught in the application, i.e., irradiation in air or irradiation and heat treatment in air.” (Ex. P at ¶5)

As evidence of alleged inequitable conduct, Zimmer points to a

[redacted] There is no evidence that this statement is inconsistent with his declaration, as Zimmer conclusorily assumes. In his declaration, Dr. Sun appears to be stating that if, instead of heating and irradiating in an inert environment (as disclosed in the “process taught in the application”), one instead uses a process in air (“i.e., irradiation in air or irradiation and heat treatment in air”), free radical concentrations will be higher than for the claimed invention. (Ex. P at ¶15.) In contrast, [redacted]
[redacted] referring to the reduced “free-radical product” disclosed in the prior art, leading to a
[redacted] irradiation at 60°C for 144 hours, and observing that if an even more efficient method were used to produce less of free radicals in air, such as a laser, irradiation, he would still expect
[redacted] that free-radical product. He also stated that during the 700-hour exposure, there
[redacted] large amount by which that does not are, without exception.” Id. These statements,
therefore, do not directly contradict Dr. Sun’s declaration and certainly do not illustrate that Dr.
Sun made false statements in his declaration.

Second, Zimmer provides no argument whatsoever, much less any evidence, that Dr. Sun acted with a specific intent to deceive the PTO. Zimmer has no evidence regarding what Dr. Sun meant in the declaration or the letter because Zimmer never deposed Dr. Sun. Zimmer's speculation regarding what Dr. Sun meant does not give rise to intent to deceive. *See Therasense*, 649 F.3d at 1290-91. Zimmer's final inequitable conduct allegation must fail.

C. Howmedica Litigated This Complex, Hard-Fought Case In Good Faith

As a separate ground for awarding fees, Zimmer argues that this case is “exceptional” because Howmedica engaged in “litigation misconduct.” “[M]ost cases awarding fees continue to involve substantial litigation misconduct.” *Tyco*, 2016 WL 3965201, at *5. “District Courts have awarded attorney fees in cases where the losing party made false statements to the PTO, used litigation as a means to extort a larger settlement, or used motion filings as a means to re-

litigate what was presented at trial.” *Id.* Importantly, “[i]solated overstatements,” “tactical blunders” and simply “changing its theor[ies]” do not constitute litigation misconduct. *Gaymar*, 790 F.3d at 1376; *Site Update Sols., LLC v. CBS Corp.*, 639 F. App’x 634, 637 (Fed. Cir. 2016); *T.F.H. Publ’ns, Inc. v. Doskocil Mfg. Co.*, No. 08-4805, 2013 WL 1090870, at *6 (D.N.J. Mar. 15, 2013); *Otsuka Pharm. Co. v. Sandoz, Inc.*, No. 07-1000, 2015 WL 5921035, at *7 (D.N.J. Oct. 9, 2015). Here, Zimmer has not alleged any serious misconduct—e.g., discovery abuses, lack of pre-suit investigation—that would justify declaring this case exceptional. Rather, “this case is exceptional only in the magnitude of the amount of paper generated and in the attorney fees and expenses incurred” so “[i]t is enough to say that each party pays its own attorneys.” *Chrimar Sys., Inc. v. Foundry Networks, Inc.*, 976 F. Supp. 2d 918, 927 (E.D. Mich. 2013).

1. Howmedica’s Submissions Regarding The Arrhenius Equation

Zimmer’s main allegation of litigation “misconduct” is that Howmedica “repeatedly prolonged litigation” by taking contradictory positions regarding the General Rule.⁹ (Dkt. 436 at 25.) A party’s decision to clarify or even change its position is not litigation misconduct. *See In re Acacia Media Techs. Corp.*, No. 05-1114, 2010 WL 2179875, at *4 (N.D. Cal. May 25, 2010) (change in claim construction not “vexatious or improper”); *T.F.H.*, 2013 WL 1090870, at *6 (plaintiff’s “changing its theory of infringement” was not litigation misconduct); *Abbott Point of Care, Inc. v. Epocal, Inc.*, 908 F. Supp. 2d 1231, 1241 (N.D. Ala. 2012) (same); *Thought, Inc. v. Oracle Corp.*, No. 12-5601, 2016 WL 4426889, at *2-3 (N.D. Cal. Aug. 22, 2016) (case not exceptional despite “continuously shifting” infringement theories since it did not involve “more

⁹ It is ironic that Zimmer claims Howmedica prolonged this litigation based on its positions on the General Rule. Zimmer unilaterally introduced a 7-year delay to this lawsuit by initiating an *inter partes* reexamination proceeding. (Ex. M at 2.) This Court granted Zimmer’s motion for summary judgment of invalidity of three of the patents in June 2007, less than two months after issuing its claim construction order. (Dkt. 176 at 18.) Nevertheless, despite telling this Court that the General Rule was “demonstrably wrong,” Zimmer repeatedly relied upon the General Rule in the reexamination proceedings during the pendency of the stay. *See infra* Sec. III.D.

egregious” conduct such as “an inadequate pre-filing investigation” or “objectively baseless” positions). And, as explained below, Howmedica’s positions were supported and in good faith.

a. The Arrhenius Equation And The General Rule

The full Arrhenius equation is a highly technical and complex mathematical calculation. (Ex. A at 6:55-65.) As such, those skilled in the art often turn to the short-hand General Rule. (Ex. G at ¶ 7; Ex. F at 8; Ex. R at 82-83; Dkt. 46-9 at ¶21; Dkt. 46 at 30-31.) The General Rule is an estimate of “Arrhenius’ equation [that] can be approximated as a doubling of annealing time for every 10°C reduction in temperature or conversely a halving of time for every increase of 10°C in annealing temperature.” (Ex. G at ¶7.) This approximation is consistent with the patents-in-suit, which state that according to the Arrhenius equation, as heating/annealing time is increased, temperature is reduced. (Ex. A at 6:53-55.) The General Rule, however, is only a starting point—it does not provide a precise and accurate result. (Dkt. 107 at 4-5.) In fact, as humorously reported in General Chemistry: “Like most rules of thumb, thumbtimes it works and thumbtimes it doesn’t.” (Ex. S at ¶ 90.) During litigation, Zimmer agreed (Dkt. 107 at 4-5):

The problem with the ‘rule of thumb’ theory is that it is demonstrably wrong. . . . [T]he ‘rule of thumb’ cannot be used to accurately predict times and temperatures equivalent to post irradiation heating at 50°C for 144 hours . . .

b. Howmedica’s Discussion Of The General Rule During Patent Prosecution Was Supported And Correct

Howmedica first introduced the General Rule during the prosecution of the ‘934 patent as part of its analysis of whether Streicher’s disclosed heating temperature of 80°C for two hours was equivalent under the Arrhenius equation to heating at 50°C for 144 hours as claimed in the ‘934 patent. (Ex. G at ¶¶6-7; Ex. F at 8.) The General Rule approximated that Streicher’s heating temperature of 80°C would require a heating time of approximately 18 hours, not two hours as Streicher disclosed, to be equivalent to the claimed invention. (*Id.*) Howmedica,

however, also performed actual testing to show that Streicher failed to disclose the claimed equivalent heating. (Ex. F at 7.) The results illustrated that the Streicher material heated at 80°C for 2 hours had a higher swell ratio, signifying a lower level of cross-linking than the inventive material. (Ex. G, ¶¶ 3-6, Chart; Ex. F at 7.) Thus, the testing confirmed the General Rule estimate that Streicher’s heating time/temperature was *not* equivalent to the claimed invention.

**c. Howmedica’s Modification To Its Arrhenius Equation
Explanation Does Not Constitute Litigation Misconduct**

Throughout the litigation, Howmedica consistently argued that the Arrhenius limitation should be interpreted as follows: “The irradiated UHMWPE material is heated for a temperature and time that is the same or similar to heating the irradiated UHMWPE material at 50°C for 144 hours according to the Arrhenius equation.” (Dkt. 46 at 30; Dkt. 74-1 at 30.) Because the Arrhenius equation is complex, in its initial claim construction brief, Howmedica provided the General Rule estimate as an aid to the Court to approximate equivalent heating. (Dkt. No. 46 at 30-31.) Shortly after considering Zimmer’s claim construction briefing, and prior to the Court’s ruling, Howmedica amended its brief to clarify and correctly advise the Court that the General Rule should not be used as a literal substitute for the Arrhenius equation. (Dkt. No. 74-1 at 30-31.) Howmedica maintained this position throughout the remaining litigation, the ‘020 patent reexamination and appeal. (*Id.*; Dkt. 99; Ex. FF at 14; Ex. U at 18-19.)¹⁰

Even had Howmedica changed its claim construction position, this is not litigation misconduct. It is commonplace—not “exceptional”—for positions to evolve during litigation.

See In re Acacia, 2010 WL 2179875, at *4 (“[I]t would hinder...the claim construction process

¹⁰ While Zimmer repeatedly mocks Howmedica’s presentation as being likened by the Court to an “Abbott and Costello skit,” in reality, the Court made a single, passing remark in jest during oral argument, when counsel inadvertently stated the wrong time/temperature pairing. (Ex. V at 27-28.) Similar colloquy between the Court and Zimmer’s attorney occurred during another hearing, but after that hearing the Court held that Zimmer’s argument was contradicted by its own witness’ testimony. (Ex. W at, e.g., 9-13, 16-19, 27-28; Dkt. 211 at 10-11.)

to find a change in claim construction position to be vexatious or improper, since the Court's role is to determine the proper construction, which may entail an evolving understanding of the claim terms."); *Abbott*, 908 F. Supp. 2d at 1241 (no litigation misconduct where party changed infringement theories); *T.F.H.*, 2013 WL 1090870, at *6; *Thought*, 2016 WL 4426889, at *2-3.

Finally, Howmedica's Arrhenius equation calculations were not baseless. While the Court ultimately did not agree with the selection of 130°C for 4 hours as a time/temperature point to calculate heating times and temperatures equivalent to 50°C for 144 hours, Howmedica's position was supported by the testimony of two experts, both of whom relied upon the patent specification for the second time/temperature pair. (Ex. A at 5:57-64; Dkt. 99-3; Dkt. 101-2.) It is disingenuous for Zimmer to allege that these calculations, performed years after the prosecution of the '934 patent contradict Dr. Wang's cross-linking testing of Streicher materials, where the General Rule estimate was fully supported by such testing. (Ex. G at ¶7; Ex. F at 8.)

In short, while Howmedica did not prevail, there was no litigation misconduct. Howmedica did not make misrepresentations to the Court or unduly prolong this litigation.

2. There Was No Reason To Dismiss This Case In Light Of Lue

Zimmer next contends that Howmedica committed misconduct because it did not dismiss this litigation when Zimmer produced the Lue reference. Zimmer's argument ignores the long and complicated record of this case regarding Lue.

Lue is an obscure and lengthy 150+ page thesis written by student Ching-Tai Lue at the University of Lowell in 1979. (See Ex. X.) [REDACTED]

[REDACTED] Lue did not describe a commercially available product or identify the material he was studying. (Ex. X at iii, 126-127.) Moreover, his experimentation on the unidentified UHMWPE material led him to conclude that irradiation decreased tensile strength, wear and fatigue

resistance, while heat-treatment generally degraded the material's properties. (*Id.*) Lue also concluded that irradiated and/or heated UHMWPE material oxidizes. (*Id.* at 83.) As such, a skilled artisan would understand from Lue that irradiation and post-irradiation heating would be undesirable and would render the material unsuitable as a medical implant—the opposite conclusion as the patents-in-suit. (Ex. S at ¶¶72-73, 75-82; Ex. Z at ¶¶66-74, 79.) Based on these disclosures, Howmedica properly disputed Zimmer's interpretation of Lue. *See Orbis Corp. v. Rehrig Pac. Co.*, No. 12-1073, 2014 WL 297304, at *3 (E.D. Wis. Jan. 27, 2014).

Indeed, as the PTAB and Federal Circuit recognized, Lue on its face did not invalidate the '020 patent claims: "[T]he procedures [of Lue] were not, on their face, similar enough such that the Board could presume, without more, that Lue's product was the same as that in the '020 patent." *Howmedica Osteonics Corp. v. Zimmer, Inc.*, 640 F. App'x 951, 957 (Fed. Cir. 2016). Specifically, it was unclear whether a material produced by Lue's disclosure would have the claimed properties. *Id.* Thus, Zimmer needed to rely on the seldom used and "tricky" doctrine of inherent anticipation. *Id.* It also needed to recreate the materials used by Lue a quarter century earlier and then test those materials to see if the resulting material would have the claimed properties. *Id.* at 957-59; (Ex. M at 17-22). The PTAB and Federal Circuit relied on Zimmer's 2007 and 2008 "reproductions" of Lue, not Lue itself, to invalidate the '020 patent.

Howmedica had a substantive good faith basis to demonstrate that Zimmer had not met its burden of proving that Lue anticipated the '020 patent. For example, since Lue did not identify the UHMWPE used, Zimmer's expert, Dr. Clough, merely used one of many possible UHMWPE that could have been available to Lue. (Ex. M at 17-19); *Howmedica*, 640 F. App'x at 957-59. While the PTAB ultimately found that Dr. Clough took "reasonable steps" to recreate Lue, that finding rests on the slenderest of reeds given that Dr. Clough could have but did not test

his purported recreation to see if it had, for example, the same tensile properties, abrasion resistance, mechanical fatigue behavior, etc., as was reported in Lue. As such, Dr. Clough could not be certain that he had actually fairly recreated Lue's material. (Ex. X at 56-76; Ex. EE at 57.) Moreover, Howmedica submitted evidence that Dr. Clough failed to faithfully follow Lue's processing steps in preparing his "recreation." *Howmedica*, 640 F. App'x at 957-58; (Ex. Z at ¶¶43-57). In addition, Howmedica argued that Dr. Clough's solubility testing was flawed and not in accordance with the testing disclosed in the '020 patent. (Ex. M at 19-22; Ex. Z at ¶¶50-56); *Howmedica*, 640 F. App'x at 959-60. Given the gaps in Zimmer's proofs pertaining to the nuanced doctrine of inherent anticipation, Howmedica did what any ordinary litigant would do—it challenged the legal significance of Zimmer's purported evidence. *Orbis*, 2014 WL 297304, at *3 (no litigation misconduct in pursuing case where "legal import" of the evidence was "unclear" before the court's ruling); *Sentex Sys., Inc. v. Elite Access Sys., Inc.*, No. 98-1462, 2000 WL 748070, at *3 (Fed. Cir. June 9, 2000) (non-precedential) (disputing defendant's invalidity contention "does not indicate a level of bad faith necessary to characterize the case as exceptional"). There is nothing nefarious or "exceptional" about Howmedica's decision.

3. Howmedica's Experts Did Not Take Frivolous Positions

Zimmer's allegations that Howmedica's experts improperly took other contradictory positions is equally flawed. Howmedica's experts merely provided supplemental opinions as is typical in any litigation. *T.F.H.*, 2013 WL 1090870, at *6 (no litigation misconduct when party "simply chang[ed] theories of infringement, particularly in light of new evidence"); *Otsuka*, 2015 WL 5921035, at *7; *Abbott*, 908 F. Supp. 2d at 1241; *Thought*, 2016 WL 4426889, at *2-3.

a. Zimmer Distorts Howmedica's Experts Positions On The Wang Papers

One of Zimmer's long-standing theories was that any test results reporting solubility of

UHMWPE in xylene corresponded to solubility in the trichlorobenzene solvent required by the patents-in-suit. (Dkt. 436, Sec. II.B.3, p. 13.) [REDACTED]

[REDACTED] During the reexamination of the '020 patent, the PTAB rejected Zimmer's theory and vindicated Howmedica's experts:

We find [Howmedica's expert testimony] that there is in fact a difference in the two solvents to be persuasive by preponderance of the evidence based on the technical expertise of Dr. Li and Dr. Pruitt and the inconsistencies between the Wang publications, suggesting that xylene and trichlorobenzene have different solubility for UHMWPE.

(Ex. M at 17.) As a result, the PTAB rejected Zimmer's theory that the Wang Papers evidenced that Lue invalidated claims of the '020 patent. *Id.* Zimmer nevertheless presses forward with its allegations that the experts' statements on this irrelevant issue constitute litigation misconduct.

The parties hotly-contested whether the Wang Papers provided solubility data in xylene, trichlorobenzene, or both. As the PTAB recognized there were "inconsistencies between the Wang publications" on this issue and as such the Wang Papers were not persuasive evidence for either party. (*Id.*; *see also id.* at 7, 11, 13 n.18.) [REDACTED]

[REDACTED]

There is nothing improper about supplementing (or even changing) a position to account for new evidence. *See T.F.H.*, 2013 WL 1090870, at *6 (no litigation misconduct where litigant "chang[ed] theories...in light of new evidence"). This is especially true because the PTAB recognized the inconsistencies and lack of clarity in the Wang Papers and ultimately determined that the Wang Papers did not support Zimmer's invalidity theories.¹¹ And, [REDACTED]

¹¹ [REDACTED] Zimmer's experts that a Howmedica expert, Dr. Pruitt, testified that one of the Wang Papers

[REDACTED], there was no reason to submit them to the PTO during the reexamination proceedings. *See Freedom*, 390 F. Supp. 2d at 86-87.¹²

b. Dr. Streicher's and Dr. Li's Opinions Are Consistent With The Streicher Reference

Zimmer's allegations that Howmedica somehow elicited knowingly false opinions from Dr. Streicher and Dr. Li regarding the teachings of the Streicher reference are likewise baseless. What Zimmer really complains about is an ordinary dispute over interpretation of the evidence.

Zimmer asserted throughout the litigation that Streicher invalidated the claims of the patents-in-suit because Streicher states that its treated material had "enhanced crosslinking," "negligible" oxidation and "reduces postoxidation effects significantly." (Dkt. 436 at 15.) However, Streicher makes clear that when it referenced those characteristics it was simply disclosing a material with more crosslinking and less oxidation than other prior art samples. Streicher's material never achieved the high levels of crosslinking and oxidation resistance as set forth in the patents-in-suit. (Ex. NN at Figs. 4, 7, 9; Ex. S at ¶¶118-120; Ex. Z at ¶98.)

The opinions of Dr. Li and Dr. Streicher (the author of the Streicher article), are consistent with the disclosures of Streicher. (Ex. OO at ¶¶ 19-23, 25-29.) For example, Dr. Streicher admitted that his work failed to eliminate oxidation. (*Id.* at ¶¶20-27). Dr. Li agreed. (Ex. S at ¶¶118-120.) While Zimmer disagrees with Dr. Streicher's explanation of his own article

[REDACTED] Zimmer's assertion is incorrect and based on a transcript excerpt that Zimmer cut-off mid-sentence. When a non-truncated transcript is reviewed, it is clear that [REDACTED]

[REDACTED] Zimmer's assertion is incorrect and based on a transcript excerpt that Zimmer cut-off mid-sentence. When a non-truncated transcript is reviewed, it is clear that [REDACTED]

¹² [REDACTED] Zimmer's assertion is incorrect and based on a transcript excerpt that Zimmer cut-off mid-sentence. When a non-truncated transcript is reviewed, it is clear that [REDACTED]

and Dr. Li's confirming expert testimony, a disagreement between the parties over how to interpret the evidence is not litigation misconduct. *Tyco*, 2016 WL 3965201, at *4 (case not exceptional "based on the 'battle of the experts'"); cf. *Garrido v. Holt*, 547 F. App'x 974, 980 (Fed. Cir. 2013) (non-precedential) ("[D]isagreement" between parties is not "misconduct."). This is especially true when the author of the evidence agrees with Howmedica, not Zimmer.

c. Dr. Li's Opinion Is Not Inconsistent With Statements Made During Prosecution Of A Pending Application

Finally, Zimmer argues Dr. Li's infringement opinion regarding Zimmer's Prolong was inconsistent with statements made by Dr. Yau to the PTO during the prosecution of a patent application not at issue here. (Dkt. 436 at 16-17.) [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Dr. Yau's prior art testing in the '510 application of different materials under different conditions led him to conclude that the prior art showed a significant increase in oxidation index. (Ex. QQ at pp. 3-4.) Different scientists reaching different conclusions regarding different materials tested under different conditions is not litigation misconduct. Indeed, Zimmer already made this argument in connection with its unsuccessful motion for summary judgment of noninfringement of the '020 patent, but the Court recognized that the significance of an increase in oxidation index was for the jury to decide. (Dkt. 211.) Moreover, Zimmer fails to provide any evidence of "misconduct," e.g., that Dr. Li knew about Dr. Yau's statements.

4. Howmedica Did Not Withhold Material Information During Reexamination Proceedings Before The PTO

Zimmer's final argument—that this case should be declared "exceptional" because of

¹³ Zimmer's argument [REDACTED] is a re-hash of arguments already rejected by Magistrate Judge Hedges. (Dkt. 166 at 7-9.)

Howmedica's conduct during the '020 patent reexamination proceedings—is just a re-hashing of its other inequitable conduct and litigation misconduct arguments. As explained above: (1) there is no obligation to disclose inaccurate test results to the PTO (*see* Sec. III.B.2); and (2) Zimmer's disagreement with Dr. Li's and Dr. Streicher's understanding of Dr. Streicher's article is nothing more than a typical litigation dispute over how to interpret the evidence (*see* Sec. III.C.3.b).

D. Zimmer's Own Conduct Supports Denial Of Its Exorbitant Fee Request

Zimmer's own conduct during the litigation—including “flip-flopping” on multiple issues—further supports denial of Zimmer's motion. *See Power Mosfet Techs., L.L.C. v. Siemens AG*, 378 F.3d 1396, 1415 (Fed. Cir. 2004) (finding that “[a] party subjected to behavior warranting an award of sanctions or fees might justifiably be denied those fees” based on its own behavior); *Propat Int'l Corp. v. Rpost, Inc.*, 473 F.3d 1187, 1195 (Fed. Cir 2007).

First, while Howmedica does not argue that modifying a position during litigation constitutes misconduct, to the extent found otherwise, it was Zimmer, not Howmedica that “flip-flopped” on the interpretation of the Arrhenius equation. In the District Court litigation, Zimmer convinced the Court that the General Rule could not be used to predict equivalent heating. (Ex. S at ¶88 (*quoting* Dkt. 107 at 4-5).) But during the reexamination proceedings, Zimmer asserted that the General Rule could be used to predict equivalent heating. (Ex. M at 7-9; Ex. RR at 35-36.) Far from merely clarifying its position (as Howmedica did), Zimmer advocated one position before this Court and a contradictory position before the PTAB and the Federal Circuit.

Second, Zimmer also asserted three different, inconsistent constructions of “annealed.” During claim construction, Zimmer construed this term as heating “at a temperature greater than 25°C but less than 140°C” to avoid infringement. (Dkt. 47 at 25-26; Dkt. 51 at 24-25; Dkt. 96 at 10-11.) The Court adopted Zimmer's construction. (Dkt. 146 at 29.) During the '020 patent reexamination, Zimmer argued that the term should not include an upper temperature limit. (Ex.

M at 23-25.) The PTAB, however, adopted this Court's construction. (*Id.*) And then, during the appeal to the Federal Circuit, Zimmer took a third position; namely, that "annealed" had no meaning. (Ex. RR at 57-58); *Howmedica*, 640 F. App'x at 960. The Federal Circuit refused to consider Zimmer's new, third theory on this claim term. *Id.* at 960-61.

In light of Zimmer's own litigation conduct, an exceptional case finding is not warranted.

E. Howmedica Reserves Its Right To Challenge The Amount Of Zimmer's Fees

In addition to its 30 page brief, Zimmer submitted an attorney declaration with nearly 600 pages of time records and expense reports for everything from airport parking to fax charges to 18-pages of library loan fees, in purported support of its exorbitant fee request at hourly rates far exceeding customary rates. But the law is clear—under § 285 "the amount of the award must bear some relation to the extent of the misconduct." *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 831 (Fed. Cir. 1992) (emphasis added); *Beckman Instruments, Inc. v. LKB Produkter AB*, 892 F.2d 1547, 1553 (Fed. Cir. 1989). Zimmer made no effort to apportion its fees. Moreover, unless and until this Court makes a finding that this case is exceptional and explains the basis for such finding, Howmedica cannot determine which fees/expenses are properly at issue. As such, Howmedica reserves its right to challenge the amount of Zimmer's fee request if the Court determines that the case is exceptional, including the apportionment of fees/expenses, the hourly rates charged by Zimmer's attorneys, and the applicability of prejudgment interest under the circumstances of this case. *Downey v. Coal. Against Rape & Abuse, Inc.*, No. 99-3370, 2005 WL 984394, at *10 (D.N.J. Apr. 27, 2005); *Home Gambling Network, Inc. v. Piche*, No. 05-610, 2015 WL 1734928, at *1 (D. Nev. Apr. 16, 2015).

IV. CONCLUSION

For the above reasons, this is not an exceptional case. Howmedica respectfully requests this Court deny Zimmer's request for attorney fees and prejudgment interest.

Respectfully submitted,

DATE: October 3, 2016

s/ William P. Deni, Jr.
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Certificate of Service

I hereby certify that on October 3, 2016, a copy of the PUBLIC REDACTED VERSION OF PLAINTIFF HOWMEDICA OSTEONICS CORPORATION'S OPPOSITION TO DEFENDANT ZIMMER'S MOTION FOR FEES AND PREJUDGMENT INTEREST was served upon counsel of record via the Court's ECF System.

s/ William P. Deni, Jr.
William P. Deni, Jr.

Dated: October 3, 2016
Newark, New Jersey